UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

23632

7590

12/22/2010

12/22/2010

SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463 EXAMINER

COVINGTON, RAYMOND K

ART UNIT PAPER NUMBER

1625

DATE MAILED: 12/22/2010

| APPLICATION NO. FILING DATE |            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|-----------------------------|------------|----------------------|---------------------|------------------|--|
| 10/816,080                  | 04/01/2004 | Marek Matusz         | TH-0996 (US)        | 8885             |  |

TITLE OF INVENTION: OLEFIN EPOXIDATION PROCESS AND A CATALYST FOR USE IN THE PROCESS

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO           | \$1510        | \$300               | \$0                  | \$1810           | 03/22/2011 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

|  | ed below or directed oth   |   |  |   |  |                               |  | correspondence address a arate "FEE ADDRESS" fo   |
|--|--|---|--|---|--|-------------------------------|--|---|
|  | ENCE ADDRESS (Note: Use BI   |   | Note: A certificate of mailing can only be used for domestic mailings of t Fee(s) Transmittal. This certificate cannot be used for any other accompanyi papers. Each additional paper, such as an assignment or formal drawing, much ave its own certificate of mailing or transmission. |   |  |                               |  |   |
| SHELL OIL C<br>P O BOX 2463<br>HOUSTON, TX   | OMPANY   | /2010   |  | State   | eby certify that the<br>s Postal Service vessed to the Mail  | is Fee(<br>vith suf<br>  Stop | ficient postage for firs                     | g deposited with the United<br>st class mail in an envelope<br>above, or being facsimile  |
|  |  |   |  |   |  |                               |  | (Depositor's name)  |
|  |  |   |  |   |  |                               |  | (Signature)   |
|  |  |   |  | L   |  |                               |  | (Date)  |
| APPLICATION NO.  | FILING DATE  |   | FIRST NAMED INVEN  | TOR   |  | ATTO                          | RNEY DOCKET NO.                              | CONFIRMATION NO.  |
| 10/816,080<br>TITLE OF INVENTION   | 04/01/2004<br>I: OLEFIN EPOXIDATI  | ON PROCESS AND A C  | Marek Matusz<br>CATALYST FOR USE   | E IN T  | THE PROCESS  | ,                             | TH-0996 (US)                                 | 8885  |
| APPLN. TYPE  | SMALL ENTITY   | ISSUE FEE DUE   | PUBLICATION FEE D  | UE  | PREV. PAID ISSU.   | E FEE                         | TOTAL FEE(S) DUE                             | DATE DUE  |
| nonprovisional   | NO   | \$1510  | \$300  | •   | \$0  |                               | \$1810                                       | 03/22/2011  |
| EXAM   | IINER  | ART UNIT  | CLASS-SUBCLASS   | 3   |  |                               |  |   |
| COVINGTON,   | RAYMOND K  | 1625  | 549-536000   |   |  |                               |  |   |
| "Fee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un | ND RESIDENCE DATA<br>less an assignee is ident<br>h in 37 CFR 3.11. Comp                               | " Indication form<br>aed. Use of a Customer<br>A TO BE PRINTED ON   | data will appear on the  | rnativesingles or as attored to the partype or type or an again an again and as a second to the partype or type or type or an again | ely, e firm (having as a gent) and the nam neys or agents. If printed.  e) ttent. If an assign assignment. | membes of uno nam             | er a 2p to lee is 3lentified below, the de   | ocument has been filed for  |
| 4a. The following fee(s)   |  |   | b. Payment of Fee(s): (  | (Pleas  |  |                               |  | oup entity Government   |
| ☐ Issue Fee ☐ Publication Fee (N☐ Advance Order -  |  | <ul> <li>☐ A check is enclosed.</li> <li>☐ Payment by credit card. Form PTO-2038 is attached.</li> <li>☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul> |  |   |  |                               |  |   |
| • •  | s SMALL ENTITY state   | is. See 37 CFR 1.27.  |  |   |  |                               | ΓΙΤΥ status. See 37 CI                       | FR 1.27(g)(2). ne assignee or other party in  |
| interest as shown by the   | records of the United Sta  | ites Patent and Trademark   | office.  | nan un  | іе аррисані; а геді  | sterea                        | attorney or agent; or th                     | e assignee or other party if  |
| Authorized Signature   |  |   |  |   |  |                               |  |   |
| Typed or printed name  |  |   | Registration No.   |   |  |                               |  |   |
| an application. Confiden   | tiality is governed by 35 d application form to the ions for reducing this bu. Virginia 22313-1450. DC | U.S.C. 122 and 37 CFR<br>USPTO. Time will vary  | 1.14. This collection i<br>depending upon the i  | is esti<br>indivi   | mated to take 12 idual case. Any co  | minutes                       | to complete, including on the amount of tire | by the USPTO to process, g gathering, preparing, and me you require to complete artment of Commerce, P.O for Patents, P.O. Box 1450 |

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | NO. FILING DATE       |                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|-----------------|-----------------------|-------------------------|----------------------|---------------------|------------------|--|
| 10/816,080      | 10/816,080 04/01/2004 |                         | Marek Matusz         | TH-0996 (US)        | 8885             |  |
| 23632 7         | 23632 7590 12/22/2010 |                         |                      | EXAM                | INER             |  |
| SHELL OIL CO    | MPANY                 |                         | COVINGTON, RAYMOND K |                     |                  |  |
| P O BOX 2463    | -0-001/0              |                         |                      | ART UNIT            | PAPER NUMBER     |  |
| HOUSTON, TX 7   | 72522463              |                         |                      | 1625                |                  |  |
|                 |                       | DATE MAILED: 12/22/2010 |                      |                     |                  |  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 102 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 102 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|  | Application No.  | Applicant(s)   |                 |  |
|--|--|--|-----------------|--|
|  | 10/816,080   | MATUSZ ET AL.  |                 |  |
| Notice of Allowability   | Examiner   | Art Unit   |                 |  |
|  | Baymond Covington  | 1625   |                 |  |
|  | Raymond Covington  | 1625   |                 |  |
| The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in or other appropriate commits IGHTS. This application is | n this application. If not included unication will be mailed in due cour | se. <b>THIS</b> |  |
| 1. This communication is responsive to <u>10/6/10</u> .  |  |  |                 |  |
| 2. ☑ The allowed claim(s) is/are <u>1-4 and 11-18</u> .  |  |  |                 |  |
| <ul> <li>3.</li></ul>  | - , , , ,  | or (f).  |                 |  |
| 2. ☐ Certified copies of the priority documents have   |  | on No  |                 |  |
| 3. ☐ Copies of the certified copies of the priority do   | • •  |  | from the        |  |
| International Bureau (PCT Rule 17.2(a)).   | cuments have been receive  | u III tilis fiational stage application i                                | TOTTI LITE      |  |
| * Certified copies not received:   |  |  |                 |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  |  | e a reply complying with the require                                     | ments           |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which give   |  |  | CE OF           |  |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") mus   | st be submitted.   |  |                 |  |
| (a) ☐ including changes required by the Notice of Draftspers   | son's Patent Drawing Revie   | w (PTO-948) attached   |                 |  |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date   | •  |  |                 |  |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date   | s Amendment / Comment o  | r in the Office action of  |                 |  |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t   |  |  | k) of           |  |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT  |  |  | the             |  |
|  |  |  |                 |  |
| Attachment(s)  | E □ Notice of Ir   | staymal Datant Application   |                 |  |
| 1. Notice of References Cited (PTO-892)  |  | iformal Patent Application<br>ummary (PTO-413),                          |                 |  |
| <ol> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statements (PTO/SB/08),</li> </ol>  | Paper No.  | ummary (PTO-413),<br>/Mail Date<br>Amendment/Comment                     |                 |  |
| Paper No./Mail Date  |  |  |                 |  |
| <ol> <li>Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol>  |  | Statement of Reasons for Allowan   | ce              |  |
|  | 9.  Other  | _•   |                 |  |
| /R. C./<br>Examiner, Art Unit 1625   | /Janet L. Andro<br>Supervisory Pa  | es/<br>tent Examiner, Art Unit 1625                                      |                 |  |
|  |  |  |                 |  |

## **DETAILED ACTION**

The abstract of the disclosure is objected to because It is to long, see MPEP § 608.01(b), and upon allowance has been corrected as follows;

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

## **ABSTRACT**

A process for the epoxidation of an olefin, which process comprises reacting a feed comprising an olefin, oxygen and an organic halide, in the presence of a catalyst comprising silver and rhenium deposited on a carrier, wherein the catalyst comprises rhenium in a quantity of at most 1.5 mmole/kg, relative to the weight of the catalyst, and at most 0.0015 mmole/m<sup>2</sup>, relative to the surface area of the carrier, and in which process the reaction temperature is increased to at least partly reduce the effect of loss of activity of the catalyst while the organic halide is present in a relative quantity Q which is maintained constant as defined herein.

Claims 1-4 and 11-18 are allowed.

Application/Control Number: 10/816,080 Page 3

Art Unit: 1625

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Covington whose telephone number is (571) 272-0681. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres at telephone number (571) 272-0867.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. C./ Examiner, Art Unit 1625